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(54) APPARATUS AND METHOD FOR INPUTTING A HANGUL

Abstract

Machine Translation Human Translation

The present invention relates to the apparatus for inputting hangeul and method, and it is the consonant corresponding to that or 2 step: and the very useful invention which indicates the single vowel and in which it necessary, in order to rapidly inputs. And input moreover, a diphthong the Hangul inputting the diphthong transformation key and diversifies the single vowel of the sentence in which a user wants it selects the consonant / vowel conversion and diphthong conversion the special key (*, #) of 2 is used the small Korean character keypad equipped in the small electronic instrument including the mobile phone etc. the consonant 2 maximums and one single vowel is juxtaposed in each numeric key (1,2.0) it is made including 3 step, the diphthong conversion repeatedly has to input several numeric keies about the single vowel and which minimizes to be troublesome according to 1 step: the selected numeric key as described above selecting the numeric key which can express the consonant of 2 maximums and one single vowel in order to indicate a consonant or a vowel.

Representative Drawing(s)

Fig. 2

➤ Keyword(s)

The hangul input keyboard, diphthong conversion, consonant / vowel conversion, diphthong conversion rank table, consonant combination table.

Descritption

· Brief explanation of the drawing

- 2 Fig. 1 shows the consonant at the general miniature hangul input keyboard and vowel arrangement.
- 3 Fig. 2 shows the consonant at the miniature hangul input keyboard and vowel arrangement.
- 4 Fig. 3 shows a part configuration of the apparatus for inputting hangeul.
- 5 Fig. 4 shows the diphthong conversion rank table applied to the apparatus for inputting hangeul and method.
- 6 Fig. 5 shows the consonant combination table applied to the apparatus for inputting hangeul and method.
- 7 Fig. 6 shows the arrival sequence inputting the arbitrary specific sentence according to the input method of th alphabet.
- 9 10: hangul input keyboard 11: controller.
- 10 12: memory unit 13: display unit.
 - Details of the Invention
 - Purpose of the Invention

The Technical Field to which the Invention Belongs and the Brior Art in that Filed

- 11 The present invention relates to the apparatus for inputting hangeul and method, more particularly, to the apparatus for inputting hangeul and the method using the small Korean character keypad equipped in the small electronic in including the mobile phone etc., and for rapidly inputting the Hangul of the sentence in which a user wants.
- Generally, in the mobile phone including the PCS phone etc, in order that the various additional service include short message service etc. is used, the small hangul input keyboard for the hangul input is equipped.
- As shown in <u>Fig. 1</u>, the hangul input keyboard is together arranged in numeric keies (1,2.0) of 10 and special of 2. And especially, the keyboard for the vowel input of Hangul corresponds to the script order of Hangul. It is arranged in the numeric key 1, in which the churn (·), generating the specific vowel which thus corresponds paper (—), and the phosphorus (]) vowel keyboard are arranged in the upper the numeric key 2, and the nu 3.
- In the meantime, the keyboard for the consonant input of Hangul is juxtaposed in the numeric key 1, in which the paper, and the phosphorus are placed 2, and 3 the other numeric keies with respective 2 the sick. The co displayed on the front the juxtaposed consonant of 2 once presses the target number key is indicated on one key. Thereafter in case it once more presses the same key within the designated time, it becomes the anothe consonant which is juxtaposed in after that with selective display.
- That is, as shown in Fig. 1, the hangul input keyboard in which a consonant and vowel are arranged is used. the arbitrary word, for example, 'feedback' tries to be inputted, firstly a user selectively successively inputs the key 4 ('¬'), numeric key 3 ('¬'), numeric key 2 (' · '), numeric key 2 (' · '), numeric key 1 'desk' is made a user. Thereafter the numeric key 8 ('¬'), numeric key 8 ('¬'), numeric key 2 (' · '), numeric key 2 (' · '), numeric key 2 (' · '), numeric key 3 ('¬'), numeric key 2 (' · '), numeric key 3 ('¬'), numeric key 3 (¬'¬'), numeric key 3 (¬¬'), numeric key 3 (¬¬'),

- ('-'), numeric key 1 ('] '), numeric key 2 (' · '), numeric key 5 (' ') selectively is successively inputted and 'rii made. Therefore, in conclusion, the numeric key is pressed with 13 burn and the word in which oneself wants 'feedback' are inputted.
- Therefore, a user easily inputs by making use of the churn, which is a consonant and vowel of the Hangul, in oneself wants especially, the vowel of Hangul juxtaposed in the numeric key 1, 2, and 3 the paper, and the phosphorus.
- But as described above, in case the vowel of Hangul selectively is inputted by making use of a churn, the parthe phosphorus, in order that for example, one diphthong like '??' is inputted, it does as described above, only selectively successively inputting the numeric key 3 ('-'), numeric key 2 (' · '), numeric key 2 (' · '), numeric key 1 (' | ').
- 18 That is, there is a problem that in order that one vowel, especially, a diphthong is inputted, several numeric kerepeatedly have to be selected. Therefore, relatively the Korea input speed is limited.

Technical challenges of the Invention,

Therefore, it are an object of the present invention to provide the diphthong conversion, the apparatus for inputangul and the method it selects the consonant / vowel conversion, and in that way for more rapidly inputting Hangul of the sentence in which a user wants. The special key (*, #) of 2 is used the small Korean character I equipped in the small electronic instrument including the mobile phone etc. the consonant of 2 maximums and single vowel is juxtaposed in each numeric key (1,2.0) to solve problems described in the above, it is created.

Structure & Operation of the Invention

- The numeric key: numeric key which the apparatus for inputting hangeul according to the present invention for achieving the above described object can express the consonant of 2 maximums and one single vowel are characterized that it is a thing done by a feature. And moreover, the input method of the Korean alphabet is maccording to 1 step: the selected numeric key as described above selecting the numeric key which can expreconsonant of 2 maximums and one single vowel in order to indicate a consonant or a vowel including the concorresponding to that or 2 step: indicating the single vowel and 3 step in which if necessary, the diphthong co inputs the diphthong transformation key about the single vowel and diversifying the single vowel.
- The preferred embodiment is circumstantially illustrated for below, and the apparatus for inputting hangeul an with reference to the attached drawing.
- Firstly, Fig. 2 shows the hangul input keyboard in which the apparatus for inputting hangeul and method are a The consonant of 2 maximums and one single vowel is juxtaposed in numeric keies (1,2.0) of 10. And 'consol vowel conversion' changed in a vowel to a consonant a selection is 'diphthong conversion', converting the pre inputted single vowel into the set up in advance diphthong and the character corresponding to the numeric ke thereafter is inputted juxtaposed to a vowel in moreover, the special key (*, #) of 2 in a consonant in other wo
- In the meantime, as described above, in the numeric key in which the consonant of 2 maximums and one single is juxtaposed of 10 and the apparatus for inputting hangeul in which the diphthong conversion and the hangul keyboard (10) in which the special key of the respective 2 juxtaposed of the consonant / vowel conversion is a are equipped, the consonant, corresponding to that the controller (11): diphthong conversion, generating com

vowel the storage (12): storing necessary data in the consonant / vowel conversion and the display unit (13) the Hangul letter combined with a production on screen is as shown in <u>Fig. 3</u> included and organized according choice input of the special key and numeric key.

- And in the storage (12), as shown in Fig. 4, the diphthong conversion rank table is managed with storage. In a user inputs the special key (*) in which 'diphthong conversion' is juxtaposed to the diphthong conversion rank with 1 time, the previously inputted single vowel is converted into a diphthong. Along with this in case the spe (*) repeatedly is consecutively, sequentially, serially inputted, in order to be connected in the single vowel in which diphthong codes for measuring the transformed diphthong as described above with the another diphthong and changing are juxtaposed in the numeric key with 1 the sick it is managed according to the number of input over least, 1 with storage.
- Moreover, in the storage (12), as shown in <u>Fig. 5</u>, the consonant combination table is managed with storage. user tries to produce consonants which are not juxtaposed in the numeric key of 10 in the consonant combination, consonant associative codes corresponding to the successively inputted numeric key of 2 a managed in the numeric key as as possible.
- Therefore, in the controller (11), in case a user input the Hangul letter in which oneself wants, the numeric ker arranged in the hangul input keyboard (10) of 10 and special key of 2 selectively are inputted, the diphthong conversion rank table and the consonant combination table stored in the storage (12) are and confirm search Hangul letter corresponding to that is produced and a user assembles. The target character is displayed on storage through the display unit (13).
- For example, in case a user inputs the Hangul letter called 'feedback' this, the numeric key 1 which a user sel inputs is recognized as '¬' corresponding to that and a user indicates in the state (S10) which as shown in <u>Fi</u> up the action mode as the text input mode in the controller (11) in the display unit (13). The numeric key 7 wh thereafter is again inputted is recognized clearly as '¬' corresponding to that. 'globe' is represented a combin (S11) (S12).
- And the diphthong conversion rank table of the storage (12) is and confirms searched according to the special which a user selectively inputs, and the special key (*) input in which that is, the diphthong conversion is juxta. The first diphthong '¬' stored by linkage is read out in the single vowel '¬'. 'globe' is and marks changed to 'ear' (S13).
- Moreover, in the controller (11), the diphthong conversion rank table is and confirms searched again accordin special key (*) which a user selectively again inputs. The second diphthong ' ' stored by linkage is read out i transformed diphthong '¬†' as described above. 'ear' is and marks changed to 'it acts'. The third diphthong '¬† by linkage is read out in the transformed diphthong '¬†' as described above according to the special key (*) when the control of the special key (*) wh
- In the meantime, as described above, it is combined with the diphthong conversion with 'desk' autogenous. S the numeric key 0 which a user selectively inputs is recognized as '&'. 'desk &' is represented a combination numeric key 5 which thereafter a user inputs is recognized as the vowel '---' which is not consonant 'p' and 'the house' is represented a combination (S17). The order table changing according to the special key (*) which the a user selectively inputs, and the special key (*) input in which that is, the diphthong conversion is juxtaposed diphthong of the storage (12) is and confirms searched. The first diphthong '---| stored by linkage is read out it single vowel '----'. 'house' is and marks changed to 'time' (S18).
- Moreover, in the controller (11), the diphthong conversion rank table is and confirms searched again according

special key (*) which a user selectively again inputs. The second diphthong '과' stored by linkage is read out i transformed diphthong '과' as described above and 'time' is and marks changed to 'anger' (S19). The numeric which finally is inputted is recognized as 'ㄴ'. 'feedback' is represented a combination.

- Therefore, a user selectively inputs the numeric key of 10 and special key of 2. A user inputs the Hangul lette especially, a diphthong is the Hangul letter in which oneself wants combined. In the key input frequency which selects at this time, so that a user input a character called 'feedback' this, the total 10 time (S11~S20) is. Therefore, a diphthong is the Hangul letter in which oneself wants combined. In the key input frequency which selects at this time, so that a user input a character called 'feedback' this, the total 10 time (S11~S20) is. Therefore, a diphthong is the Hangul letter in which oneself wants combined. In the key input frequency which selects at this time, so that a user input a character called 'feedback' this, the total 10 time (S11~S20) is. Therefore, a character called this as described above, by using a churn, the paper, and the phosphorus 'feedback', it reduces 3 times in comparision with (= total 13 time).
- For your reference, as shown in <u>Fig. 1</u>, the hangul input keyboard using a churn, the paper, and the phosphol used. In order that a character called 'computer' is inputted, it is necessary to have the key input of the total 1 But in case the hangul input keyboard is used, relatively it is necessary to have as to an enemy, than that only input of the total 10 time.
- The or more, and the above-described preferred embodiment of the present invention are disclosed for the ot example. An etc. of the part will be various another preferred embodiment possible in the technical mapping c present invention and the technical scope disclosed in the patent claim which hereinafter is attached the pers in the art in the world.

Effects of the Invention

As described above, in order to rapidly inputs. And input moreover, a diphthong the Hangul of the sentence ir selects the consonant / vowel conversion, and in that way a user wants. And diphthong conversion the special #) of 2 is used the apparatus for inputting hangeul and the method for being made with a configuration juxtaph consonant of 2 maximums and one single vowel the small Korean character keypad equipped in the small element including the mobile phone etc. in each numeric key (1,2.0), it is the very useful invention which re has to input several numeric keies minimizing to be troublesome.

Scope of Claims

Claim[1]:

37 The apparatus for inputting hangeul wherein it is comprised of the consonant, corresponding to that according numeric key: diphthong transformation key: vowel included in the numeric key and the consonant / vowel transformation key: numeric key which controls in order to assemble the letter to a consonant or it expresses diphthong which is not double consonant, and the choice input of the consonant / vowel transformation key aid diphthong transformation key diversifies the vowel inputted to the numeric key to a diphthong can express the consonant of 2 maximums and one single vowel the control means, generating compounds a vowel a plurality vowels and a plurality of complex consonent table types changing according to the diphthong transformation including the storage means stored.

Claim[2]:

The apparatus for inputting hangeul of claim 1, wherein in the numeric key, a consonant and one vowel of 2 maximums can be expressed; and in order, a consonant are indicated according to the input collection of the

Claim[3]:

The apparatus for inputting hangeul of claim 1, wherein the numeric key which expresses a vowel if the vowe inputting in the state where a consonant is indicated is not a vowel included to the numeric key in an input in 1 numeric key expressing a consonant is inputted with 1 time; and a vowel is indicated.

Claim[4]:

The apparatus for inputting hangeul of claim 1, wherein the consonant expressed as the numeric key and the combined to a vowel the numeric key are inputted in a production and a consonant is indicated; and the consover vowel side ?? key is inputted thereafter in order to indicate a vowel and the numeric key is inputted and it indicate a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key are inputted in a production and a consonant is indicated; and the numeric key are inputted in a production and a consonant is indicated; and the numeric key are inputted in a production and a consonant is indicated; and the numeric key are inputted in a production and a consonant is indicated; and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is inputted and it indicates a vowel and the numeric key is input to indicate a vowel and the numeric key is input to indicate a vowel and the numeric key is input to indicate a vowel and the numeric key is input to indicate a vowel and the numeric key is input to indicate a vowel and the numeric key is input to indicate a vowel key in the numeric key is input to indicate a vowel key in the numeric key i

Claim[5]:

The input method of the Korean alphabet wherein it is made according to 1 step: the selected numeric key as described above selecting the numeric key which can express the consonant of 2 maximums and one single order to indicate a consonant or a vowel including the consonant corresponding to that or 2 step: indicating the vowel and 3 step in which if necessary, the diphthong conversion inputs the diphthong transformation key about single vowel and diversifying the single vowel.

Claim[6]:

The input method of the Korean alphabet of claim 5, wherein the special key in which the diphthong conversic juxtaposed is inputted; it confirms the previously inputted single vowel; and it is the low rank 1 step: and the s diphthong as described above searching the diphthong corresponding and saves in the confirmed single vow with the previously inputted single vowel including the low rank 2 step which 3 step replaces.

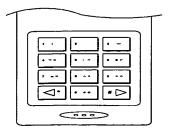
Claim[7]:

The input method of the Korean alphabet of claim 5, wherein 3 step becomes consecutively, sequentially, serial special key in which the diphthong conversion is juxtaposed with typematic; and it assembles the single vowe arbitrary one diphthong corresponding to the repetition time with conversion.

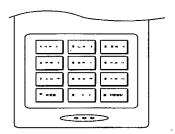
Claim[8]:

57 The input method of the Korean alphabet wherein 3 step: and the consonant / vowel transformation key which the consonant / vowel transformation key in order to indicate 2-step: vowel which indicates the consonant corresponding to that and is included in the inputted numeric key as described above are inputted according to the inputted numeric key as described above inputting the numeric key which can express the consonant of 2 maximums and one single vowel in order to indicate a consonant or a vowel; and it is made including 4 step in the selected numeric key as described above and indicates a vowel.

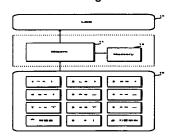
DRAWINGS



• Fig. 1



• Fig. 2



• Fig. 3

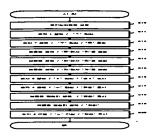
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• Fig. 4

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⊕ Fig. 5



• Fig. 6